

### Create class Cylinder

- Write a class Cylinder with two private fields, Circle base and int height. Is it fair to say that each Cylinder **HAS-A** circle? This relationship is an example of **composition**. (the container object cannot exist without the existence of the contained object)
- Provide a constructor that takes two int parameters, r and h, initializes base to be a **new Circle** with radius r, and initializes height to be h.
- Add a method double getVolume that returns the volume of the cylinder.

### Create class Square

- Write class Square that **extends** Rectangle (we can always say that a square **IS-A** rectangle)
- Since a square also has a length and width, there is no need to redefine these fields.
- Provide a constructor that creates a Square by sending its single parameter (int side) to the superclass constructor using super()
- Add a method double incircleArea that calculates and returns the area of this square's incircle (inscribed circle). We have already written the code to calculate circle area, and can use that class here! Create a new Circle in this method and call its getArea method. Note: you will need to use either getLength or getWidth to get the length of a side from Square.

### Test everything in Main

- Create a Cylinder object, passing it two arguments (radius and height) that are taken from user input.
- Call the getVolume method of Cylinder and print the value to the screen.
- Create a Square object, passing it a single argument(side) that is taken from user input
- Call each getArea, getVolume, and incircleArea, and print the values.